

**REMARKS**

Applicant respectfully requests reconsideration of the application.

Claims 1-5, 11, 15-25 stand rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,208,746 to Musgrave ("Musgrave '746). Claims 6-10 and 12-14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Musgrave '746 in view of U.S. Patent No. 6,377,699 to Musgrave et al. ("Musgrave '699").

**Claim 1**

The Office has apparently overlooked the fact that claim 1 recites: "encoding a representation of the user attribute into a media signal captured by the media signal capture device." The Office contends that Musgrave '746 teaches the claimed media signal capture device as a "scanner or a system, see col. 3 lines 19-20". This scanner is used to capture a user's biometric data. Assuming that this biometric data corresponds to "a user attribute" as claimed, Musgrave '746 does not teach encoding a representation of the user attribute into a media signal captured by the scanner. Instead, it teaches encoding some other media signal not captured by the scanner with the biometric data.

Musgrave '746 teaches how to scramble a bitstream with a user's biometric data so that one must have the user's biometric data to view an unscrambled version of the bitstream. In particular, this reference teaches how to encode a bitstream at a data provider with biometric data of a user so that data sent to that user is scrambled with that user's biometric data. This approach prevents other users from viewing or listening to the unscrambled data without having the user's biometric data.

In contrast, the method of claim 1 specifically refers to encoding a representation of the user attribute in a media signal captured by the media signal capture device, as opposed to a media signal from some other device as in Musgrave '746.

Since Musgrave '746 fails to teach all of the elements of claim 1, it does not anticipate claim 1.

Claims 2-5 are patentable for the same reasons as claim 1. Further, regarding claim 3, the Office contends that: "it is inherent that the embedded message is substantially imperceptible to a human." However, Musgrave '746 explicitly teaches that the biometric watermark scrambles the bitstream such that it causes video to be fuzzy or distorted and audio to be garbled and noisy.

See, Musgrave '746 at col. 5, lines 1-9. The biometric watermark, therefore, clearly is intentionally made perceptible to a human so that the quality of the video or audio is poor. This scrambling approach is used in Musgrave '746 so that only a user with the correct biometric data can unscramble the video or audio that has been encoded with the biometric data. All other users that do not have the correct biometric data cannot unscramble the data, and therefore, can only view or hear a fuzzy, distorted or garbled version.

In contrast, claim 3 recites "steganographically embedding the auxiliary message into the media signal such that the message is substantially imperceptible to a human. Unlike the scrambling approach taught in Musgrave '746, which introduces perceptible noise into a video or audio bitstream, claim 3 recites an embedding method where the embedded message is substantially imperceptible to a human. Therefore, Musgrave '746 does not anticipate claim 3.

#### **Claim 6**

Both Musgrave '746 and Musgrave '699 fail to teach: "encoding the user attribute into a media signal captured by the media signal capture device" as recited in claim 6. The Office contends that Musgrave '699 discloses the media signal capture device "being a camera with an eyepiece." However, neither Musgrave '746 nor Musgrave '699 teach encoding the user attribute into an image captured by the camera as recited in claim 6.

Claims 7-10 are patentable for the same reasons as claim 6. In addition, these claims include additional elements that distinguish them from the cited art. For example, the Office ignores elements of claim 9 stating that the retinal scan data is embedded in an image captured by the same sensor that captures the retinal scan.

#### **Claim 11**

Musgrave '746 fails to disclose "an encoder for encoding a representation of the user attribute into a media signal captured by the media signal capture device" as recited in claim 11. The Examiner has invited Applicant's attention to Fig. 1 in Musgrave '746. This diagram clearly shows that the encoder does not encode biometric data into a media signal captured by the biometric scanner 22 (which the Office contends corresponds to the media signal capture

device). Instead, the biometric data is used to encode a “requested data bitstream”, which is stored at a data provider 16. Thus, the biometric data must be sent from the biometric scanner 22 to the data provider, where the encoder 26 encodes it with a bitstream that is not captured by the biometric scanner.

Claims 15-19 are patentable for the same reasons as claim 11 and include additional elements that further distinguish them from the cited art

### **Claim 12**

Both Musgrave ‘746 and Musgrave ‘699 fail to teach: “an encoder for encoding the user attribute into a media signal captured by the media signal capture device” as recited in claim 12.

Claims 13-14 are patentable for the same reasons as claim 12 and include additional elements that further distinguish them from the cited art.

### **Claim 20**

Musgrave ‘746 fails to disclose: “decoding user attribute data encoded in the media signal within a media signal capture device that captured the media signal.” As noted previously, the Office contends that the biometric scanner corresponds to the claimed media signal capture device. However, in Musgrave ‘746, the biometric data is not encoded in a media signal captured by the scanner. In addition, the biometric data encoding is not performed “within a media signal capture device that captured the media signal” as claimed.

The decoding process in Musgrave ‘746 does not compare “the decoded user attribute data with user attribute data computed for a person” as claimed. Instead, this reference teaches that the biometric data from the user’s biometric scanner is used to remove the biometric data encoded with a bitstream sent to the user from a data provider. See, Col. 4, lines 6-15. It is not clear from the Action whether the Office is taking the position that using biometric data from the scanner to remove biometric data from the encoded bitstream is somehow equivalent to the claimed process of comparing. Note that in contrast to Musgrave ‘746, claim 20 recites a decoding process, and then a comparing process that compares the decoded user attribute data

with user attribute data computed for a person. Musgrave '746 teaches a decoding process where biometric data scanned from the user is used to remove encoded biometric data.

Claims 21-25 are patentable for the same reasons as claim 20.

**Concluding Remarks**

The cited art fails to disclose, teach or suggest all of the elements of the claims.  
Therefore, the claims should be in condition for allowance.

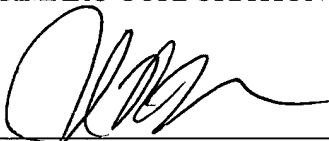
Date: February 2, 2004

CUSTOMER NUMBER 23735

Phone: 503-885-9699  
FAX 503-885-9880

Respectfully submitted,

DIGIMARC CORPORATION

By 

Joel R. Meyer  
Registration No. 37,677

Claims 21-25 are patentable for the same reasons as claim 20.

**Concluding Remarks**

The cited art fails to disclose, teach or suggest all of the elements of the claims.  
Therefore, the claims should be in condition for allowance.

Date: February 2, 2004

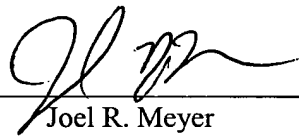
CUSTOMER NUMBER 23735

Phone: 503-885-9699  
FAX 503-885-9880

Respectfully submitted,

DIGIMARC CORPORATION

By



Joel R. Meyer  
Registration No. 37,677